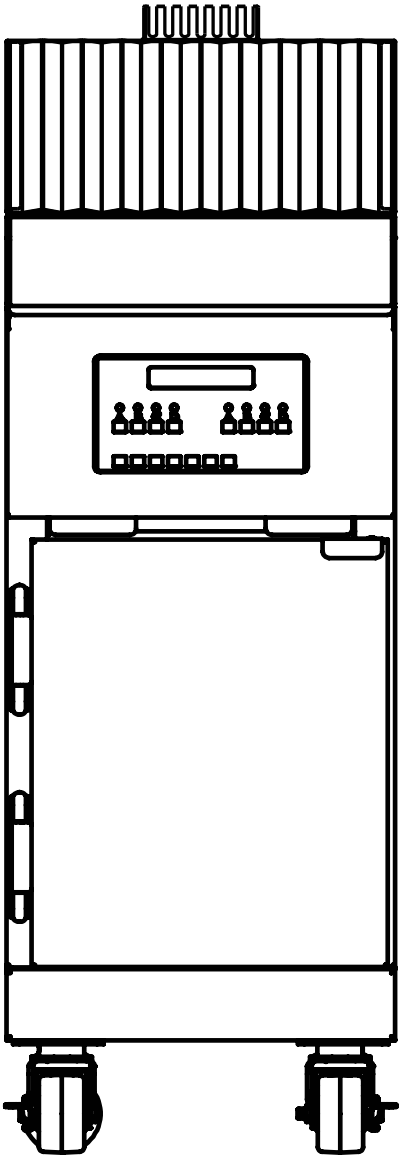
ALTO-SHAAM®

GAS FRYER

FryTech Series

ecosmart®



ASF-60G
In & Out
Gas Fryer

- **INSTALLATION**
- **OPERATION**
- **MAINTENANCE**

FryTech™

24•7 Your Service Hotline 1-800-558-8744

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Delivery 1
Unpacking 1
Safety Procedures and Precautions 2

Installation
Dimension Drawings, Weights & Capacities 3
Clearance Requirements. 4
Site Installation 5
Ventilation. 6
Gas Specifications 7
Gas Connection 8
Restraint Requirements - Mobile Equipment 9
Electrical Requirements 10

Operation
Oil/Shortening Requirements. 11
Controls Behind Access Panel 12
Panel Identification 13
Cook Cycle 14
Boil Out Mode 15
Product Counts 16
Display Descriptions 16
Product Key Programming 17
System Programming 20
Programming Custom Product & Action Alarms. 21
Suggested Frying Times 22

Cleaning
Daily Cleaning & Maintenance 24
Boil-Out Instructions 25

Service
Control Troubleshooting 27
Unit Troubleshooting 27
Extended Limited Frypot Warranty 28
ASF-60G Service Views 29

Wire Diagrams
Always refer to the wire diagram(s) included with the unit for most current version.

Warranty
Transportation Damage and Claims . . . . . Back Cover
Limited Warranty. . . . . Back Cover

DELIVERY

This Alto-Shaam appliance has been thoroughly tested and inspected to ensure only the highest quality unit is provided. Upon receipt, check for any possible shipping damage and report it at once to the delivering carrier. ***See Transportation Damage and Claims section located in this manual.***

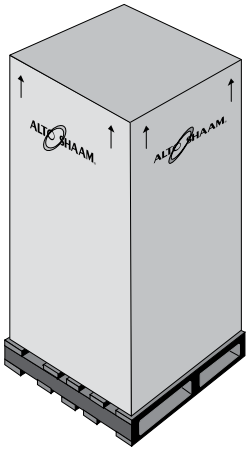
This appliance, complete with unattached items and accessories, may have been delivered in one or more packages. Check to ensure that all standard items and options have been received with each model as ordered.

Save all the information and instructions packed with the appliance. Complete and return the warranty card to the factory as soon as possible to ensure prompt service in the event of a warranty parts and labor claim.

This manual must be read and understood by all people using or installing the equipment model. Contact the Alto-Shaam Tech Team Service Department if you have any questions concerning installation, operation, or maintenance.

NOTE: All claims for warranty must include the full model number and serial number of the unit.

UNPACKING



1. Carefully remove the appliance from the carton or crate.

   NOTE: Do not discard the carton and other packaging material until you have inspected the unit for hidden damage and tested it for proper operation.

2. Read all instructions in this manual carefully before initiating the installation of this appliance.

   DO NOT DISCARD THIS MANUAL.
   This manual is considered to be part of the appliance and is to be provided to the owner or manager of the business or to the person responsible for training operators. ***Additional manuals are available from the Alto-Shaam Tech Team Service Department.***

3. Remove all protective plastic film, packaging materials, and accessories from the appliance before connecting electrical power. Store any accessories in a convenient place for future use.

DANGER

BEFORE STARTING THE APPLIANCE, MAKE CERTAIN YOU DO NOT DETECT THE ODOR OF GAS.

IF THE ODOR OF GAS IS DETECTED:

- **DO NOT attempt to light any appliance.**
- **DO NOT touch any electrical switches.**
- **Extinguish any open flame.**
- **Use a telephone OUTSIDE THE PROPERTY & IMMEDIATELY contact your gas supplier.**
- **If unable to contact your gas supplier, contact the fire department.**

WARNING

In the event of loss of power to the appliance, turn the "burner control knobs" to the OFF position. Remove food product from the unit. If burner control fails to extinguish the flame, shut off main gas valve located in rear of unit.

KEEP THIS MANUAL IN A CONVENIENT LOCATION FOR REFERENCE.

INSTALLATION

SAFETY PROCEDURES AND PRECAUTIONS

Knowledge of proper procedures is essential to the safe operation of electrically and/or gas energized equipment. In accordance with generally accepted product safety labeling guidelines for potential hazards, the following signal words and symbols may be used throughout this manual.

DANGER

Used to indicate the presence of a hazard that WILL cause severe personal injury, death, or substantial property damage if the warning included with this symbol is ignored.

WARNING

Used to indicate the presence of a hazard that CAN cause personal injury, possible death, or major property damage if the warning included with this symbol is ignored.

CAUTION

Used to indicate the presence of a hazard that can or will cause minor or moderate personal injury or property damage if the warning included with this symbol is ignored.

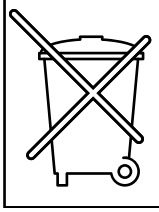
CAUTION

Used to indicate the presence of a hazard that can or will cause minor personal injury, property damage, or a potential unsafe practice if the warning included with this symbol is ignored.

NOTE: Used to notify personnel of installation, operation, or maintenance information that is important but not hazard related.

1. This appliance is intended to cook, hold or process foods for the purpose of human consumption. No other use for this appliance is authorized or recommended.
2. This appliance is intended for use in commercial establishments where all operators are familiar with the purpose, limitations, and associated hazards of this appliance. Operating instructions and warnings must be read and understood by all operators and users.
3. Any troubleshooting guides, component views, and parts lists included in this manual are for general reference only and are intended for use by qualified technical personnel.
4. This manual should be considered a permanent part of this appliance. This manual and all supplied instructions, diagrams, schematics, parts lists, notices, and labels must remain with the appliance if the item is sold or moved to another location.

NOTE



For equipment delivered for use in any location regulated by the following directive:

DO NOT DISPOSE OF ELECTRICAL OR ELECTRONIC EQUIPMENT WITH OTHER MUNICIPAL WASTE.

ASF-60 SPECIFICATIONS

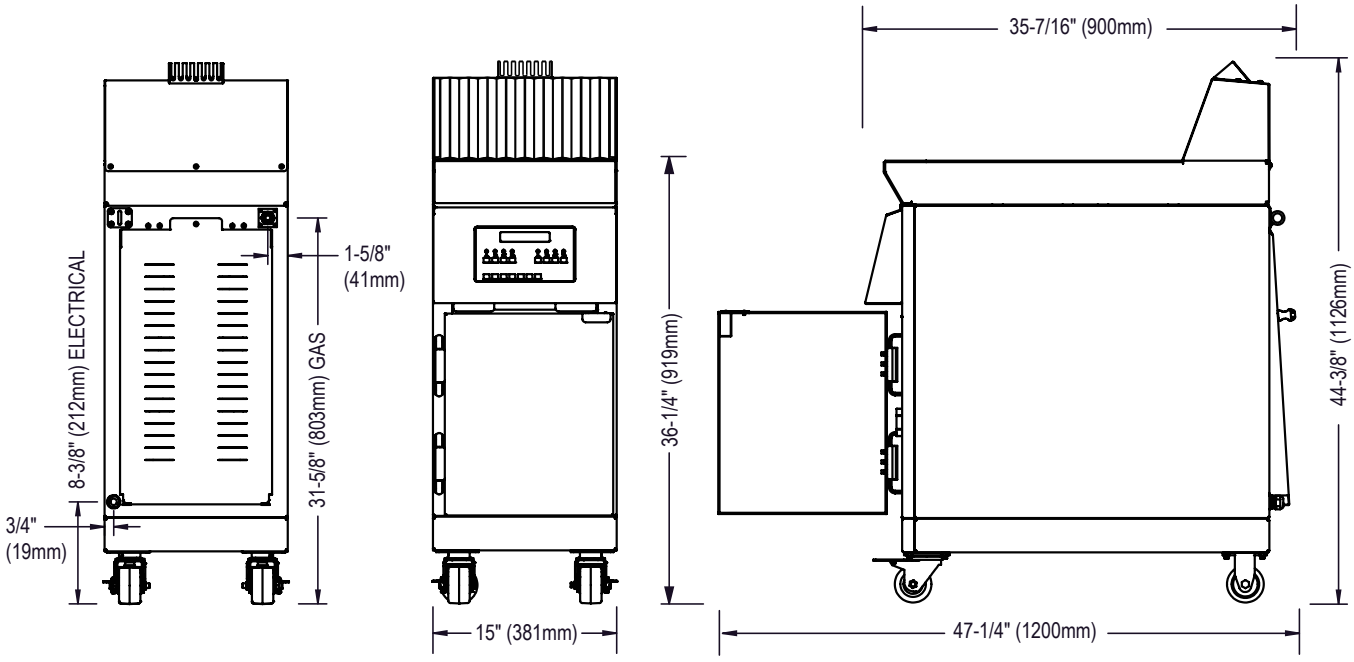
DIMENSIONS EXTERIOR (H X W X D)
44-3/8" x 15" x 35-7/16" (1126mm x 381mm x 900mm)

CAPACITY
SHORTENING/OIL: 62 lb (28 kg) MAXIMUM
LOAD CAPACITY: 8 lb (4 kg) MAXIMUM

WEIGHT EST	NET WEIGHT	SHIP WEIGHT
WITHOUT LIFTS	248 lb (113 kg)	330 lb (150 kg)
WITH LIFTS	265 lb (120 kg)	347 lb (157 kg)
CARTON DIMENSIONS (L X W X H)	22" x 39" x 55" (559mm x 991mm x 1397mm)	

STANDARD ACCESSORIES	
☐ Basket, Half-Size (2 INCLUDED AS STANDARD)	BS-35214
Brush Set (ONE 2-BRUSH SET INCLUDED AS STANDARD)	
☐ SCRUB BRUSH	BH-28693
☐ STRAIGHT BRUSH	BH-28691

OPTIONS	
☐ Frypot Cover	CONTACT FACTORY
☐ Strainer/Skimmer	CE-27400
☐ Banking Strip (1 STRIP REQ'D FOR EVERY 2 BANKED FRYERS)	1011147
☐ Mobile Oil Caddy with wand	TO-28359



INSTALLATION

DANGER

IMPROPER INSTALLATION, ALTERATION, ADJUSTMENT, SERVICE, OR MAINTENANCE COULD RESULT IN SEVERE INJURY, DEATH, OR CAUSE PROPERTY DAMAGE.

READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS THOROUGHLY BEFORE INSTALLING OR SERVICING THIS EQUIPMENT.

DANGER

AVERTISSEMENT : UNE INSTALLATION, UN AJUSTEMENT, UNE ALTÉRATION, UN SERVICE OU UN ENTRETIEN NON CONFORME AUX NORMES PEUT CAUSER DES DOMMAGES À LA PROPRIÉTÉ, DES BLESSURES OU LA MORT.

LIRE ATTENTIVEMENT LES DIRECTIVES D'OPÉRATION ET D'ENTRETIEN AVANT DE FAIRE L'INSTALLATION, OU L'ENTRETIEN DE CET ÉQUIPEMENT.

CAUTION

METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

SITE INSTALLATION

MINIMUM CLEARANCE REQUIREMENTS

	COMBUSTIBLE SURFACES	NON-COMBUSTIBLE SURFACES
RIGHT SIDE	6" (152mm)	0" (0mm)
LEFT SIDE	6" (152mm)	0" (0mm)
BACK	6" (152mm)	
FRONT	25" (635mm)	

PLUS: 6" (152mm) minimum between the element swing in the extended position and the lower edge of the exhaust hood and filter media.

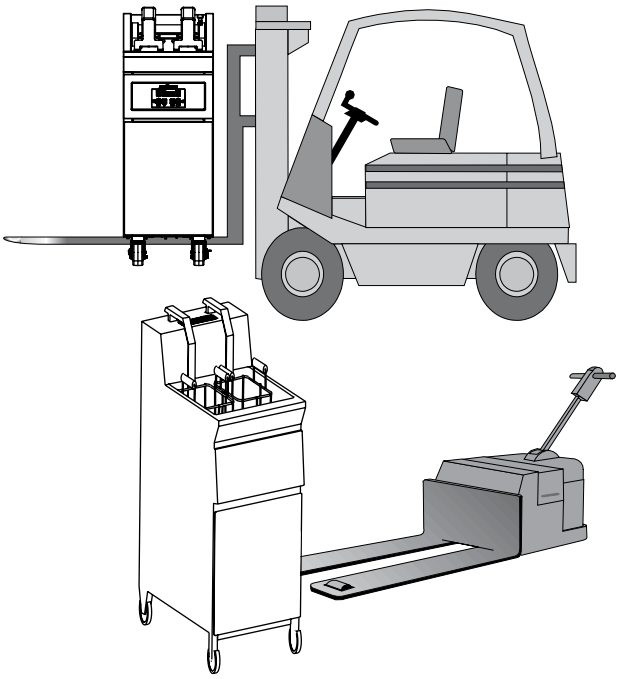
Ne pas installer à une distance inférirure à celle indiquée ce-dessous d'une parol en matiére combustible: Côtés 6 pouches, Arriére 6 pouches.

WARNING

MINIMUM CLEARANCES MUST REMAIN UNOBSTRUCTED.
DO NOT place insulation or any other type of materials in clearance areas.

CAUTION

DO NOT USE FORKLIFT FROM FRONT OR REAR OF UNIT.
USE FORKLIFT FROM SIDE ONLY.



INSTALLATION

SITE INSTALLATION

1. It is the responsibility of the installer to verify that this installation is in compliance with the specifications listed in this manual and with local code requirements.
2. Hood installation is required.
3. Both cooking and cleaning functions require unobstructed access. The frypots, control panels, and front access doors must be maintained free from obstruction. The front access door and back panel must be accessible for service and maintenance.
4. Locate the appliance on a firm, level surface ONLY. The surrounding area must be kept clear of all combustible materials.
5. **FOR YOUR SAFETY DO NOT** store or use any flammable liquids or allow flammable vapors in the vicinity of this fryer or any other appliance.
6. **FOR YOUR SAFETY DO NOT place insulation or any other type of materials in clearance areas.**
7. When properly installed, the fryer is designed for operation adjacent to non-combustible floors and walls with a 6" clearance at the back. Clearances from all combustible construction is a minimum of 6" (152mm) at the back and both sides. Concrete, tile, terrazzo, or metal surfaces are recommended. Metal over a combustible material may not meet code for non-combustible surfaces. Verify site selection with local codes for specific requirements.
   Doit être utilisé seulement sur des planchers non inflammables.
8. Adequate means must be provided to limit the movement of this appliance. A restraining device is required for field installation.
9. DO NOT install this appliance in any area where it may be affected by any adverse conditions such as steam or dripping water, etc. DO NOT install fryer over a drain.

WARNING

BURN WARNING: Make certain the fryer is stabilized before operation to prevent any movement or tipping and the possibility of severe burns caused by hot, splashing shortening or oil.

CAUTION

TO PREVENT PERSONAL INJURY, USE CAUTION WHEN MOVING OR LEVELING THIS APPLIANCE.

DANGER

To avoid electrical shock, this appliance MUST be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/ NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

WARNING

IMPROPER INSTALLATION MAY RESULT IN FIRE.

Carefully read and follow all installation instructions located in this manual.

INSTALLATION

VENTILATION

DANGER

Installation, air adjustment and/or service work must be in accordance with all local codes and must be performed by a certified service technician qualified to work on gas appliances.

An adequate ventilation system is required for commercial cooking equipment. Information may be obtained by writing to the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. When writing refer to NFPA No. 96.

1. A single ASF-60G auto-lift gas fryer requires a minimum of 120 CFM make-up air for natural gas and 48 CFM for propane gas. Kitchen ventilation must be of sufficient capacity to prevent a negative-pressure condition. **DO NOT** obstruct or restrict ventilation nor the air flow required to support combustion.
2. **DO NOT** obstruct the flow of the exhaust flue at the top rear of the fryer. It is especially critical that gas supply piping and electrical support cord and/or receptacle be routed away from the path of the hot combustion fumes.
3. This fryer cannot be direct vented.
4. Install the fryer under a ventilation hood meeting all applicable code requirements. Combustion fumes must be vented in accordance with local, state, or national codes.

CAUTION

To prevent malfunction or cause negative back draft, DO NOT obstruct exhaust flues or attach any flue extension that will impede proper burner operation.

DANGER

FAILURE TO VENT THIS FRYER PROPERLY MAY BE HAZARDOUS TO THE HEALTH OF THE OPERATOR.

Equipment damage and operational problems may also be the consequence of improper venting. Any damages sustained by a failure to properly vent this fryer are not covered under warranty.

Ventilating hoods and exhaust systems shall be permitted to be used to vent appliances installed in commercial applications.

Where automatically operated appliances are vented through a ventilating hood or exhaust system equipped with a damper or with a power means of exhaust, provisions shall be made to allow the flow of gas to the main burners only when the damper is open to a position to properly vent the appliance and when the power means of exhaust is in operation. IN ACCORDANCE WITH NFPA 54 COMMONWEALTH OF MASSACHUSETTS ONLY.

GAS SPECIFICATIONS

The Alto-Shaam open gas fryer has been set to operate with either natural gas or propane as indicated on the fryer identification name plate.

⚠ DANGER

CONNECTING TO THE WRONG GAS SUPPLY COULD RESULT IN FIRE OR AN EXPLOSION CAUSING SEVERE INJURY AND PROPERTY DAMAGE.

WARNING

TO AVOID SERIOUS PERSONAL INJURY, installation of this appliance must conform to local, state, and national codes; the current edition of the American National Standard Z223.1, National Fuel Gas Code, and all local municipal building codes. In Canada, installation must be in accordance with Standard CAN/CSA B 149.1 and Installation Codes - Gas Burning Appliances, and local codes.

Category	I_{2H} at 20 mbar for use in AT, DK, FI, IE, IT, PT, SE, CH.
Category	$I_{2E(20)}$ at 20/25 mbar for use in DE, LU.
Category	$I_{2E+(20/25)}$ at 20/25 mbar for use in BE, FR.
Category	$I_{2L(25)}$ at 25 mbar for use in NL.
Category	$I_{3+(28\text{-}30/37)}$ at 28-30/37 mbar for use in BE, FR, IE, IT, LU, PT, CH.
Category	$I_{3B/P(30)}$ at 30 mbar for use in DK, FI, NL, SE.
Category	$I_{3B/P(50)}$ at 50 mbar for use in AT, DE, CH.
Category	$I_{3P(37)}$ at 37 mbar for use in FI, DE, IE, CH.

Declared input (kW)	35.15
Gas Group	$I_{2H(20)}$, $I_{2E(20)}$, $I_{2E+(20/25)}$, $I_{2L(25)}$, $I_{3+(28\text{-}30/37)}$, $I_{3B/P(30)}$, $I_{3B/P(37)}$, $I_{3B/P(50)}$, $I_{3P(37)}$, $I_{3P(50)}$
Inlet pressure (mbar)	17.5 (NAT) and 27.5 (LP)
Declared setting pressure at the outlet from the gas valve (mbar)	12.5 (NAT) and 25 (LP)
Main burner type	Infrared type with blower and venturi valve
Number of injectors	1
Main injector type	N/A
Main injector size and markings	N/A
Main burner aeration opening size	Variable pre-set at factory
Ignition	Direct spark electronic ignition
Inlet connection	20.995 mm male thread

The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psi. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psi.

NOTE: Customer/installer must provide manual gas shut-off valve in accordance with local code requirements.

GAS PRESSURE CHART

The fryer has been factory adjusted according to the gas type specified on the fryer identification name plate.

GAS FRYER TECHNICAL SPECIFICATIONS

Natural Gas ←

Min. Connected Pressure	5.0" W.C.	1.2 kPa
Max. Connected Pressure	11.0" W.C.	2.74 kPa
Gas Consumption	120 CFM	
Gross Thermal Output	120,000 Btu/hr	

GAS SPECIFICATIONS

NATURAL GAS 120,000 BTU/hr. INPUT

INSTALLATION REQUIREMENTS

GAS CONNECTION: 1/2" NPT

CHECK PLUMBING CODES FOR PROPER SUPPLY LINE SIZING TO ATTAIN MINIMUM BURNER MANIFOLD PRESSURE SHOWN:

NATURAL GAS: 5.0" W.C.

MAXIMUM INLET PRESSURE: 11" W.C.

NOTE: If a flexible gas line is used, it must be AGA approved, commercial type and at least 3/4" I.D.

HOOD INSTALLATION IS REQUIRED

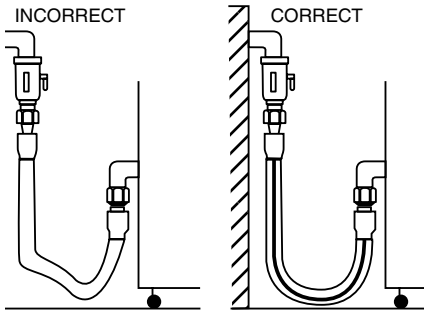
INSTALLATION

GAS SPECIFICATIONS

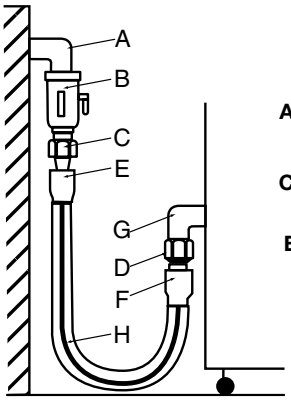
DANGER

Installation, air adjustment and/or service work must be in accordance with all local codes and must be performed by a certified service technician qualified to work on gas appliances.

Use an approved gas pipe sealant at all external threaded connections, gas piping used on gas connections must avoid sharp bends that may restrict the flow of gas to the appliance. If the connected pressure exceeds 14.0" W.C. (3.5 kPa) for propane and 11.0" W.C. (2.74 kPA) for natural gas, a step-down regulator is required to be supplied by the owner/operator.



Close the individual manual shut-off valve to ***isolate the fryer*** from the gas supply piping system during any pressure testing at test pressures equal to or less than 1/2 psig. (3.4 kPa). The fryer and individual shut-off valve ***must be disconnected*** from the gas supply piping system during any pressure testing at pressures in excess of 1/2 psig. (3,4 kPa).



GAS INTAKE

A-G Installation elbow
B Wall Valve
C-D Three-piece union fitting (minimum 1 per installation)
E-F End connector for the flexible tube
H Marking line

In the U.S.A., installation must conform to local codes or, in the absence of local codes, with the current edition of the ***National Fuel Gas Code***, NFPA-54 and ANSI Z83.11a CSA 1.8a 2004 (or latest edition). In Canada, installation must be in accordance with local codes, CAN/CGA-B149.1, ***Installation for Natural Gas Burning Appliances and Equipment*** (latest edition) or CAN/CGA-B149.2 ***Installation for Propane Burning Appliances and Equipment*** (latest edition).

The inlet supply line must be properly sized to accommodate all individual appliances simultaneously used on the same line but must never be smaller than 3/4" I.D.

LEAK TESTING

Installation requires gas leak testing on all gas piping and fittings. Use an approved electronic leak device or a soap and water solution at all gas connections. If bubbling appears when using a soap and water solution, the connection must be refitted. Never use an open flame to leak test.

DANGER

NEVER USE AN OPEN FLAME TO LEAK TEST.

RESTRAINT REQUIREMENTS - MOBILE EQUIPMENT

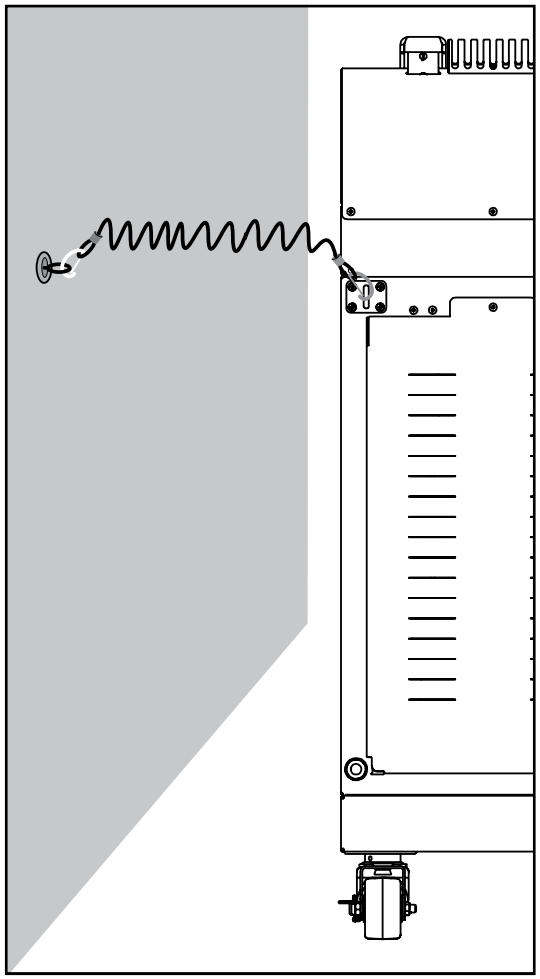
The fryer must be supplied with a connector that complies with all state and local installation codes.

Any appliance that is not furnished with a power supply cord but that includes a set of casters must be tethered. Adequate means must be provided to limit the movement of this appliance without depending on or transmitting stress to the electrical conduit. The following requirements apply:

1. Casters must be a maximum height of 4-inches (102mm).

2. Such mobile appliances must be installed with the use of a flexible connector secured to the building structure.

A mounting connector for a restraining device is located on the upper back flange of the appliance chassis, approximately 31" (787mm) from the floor. A flexible connector is not supplied by nor is it available from the factory.



WARNING

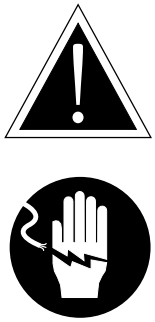
RISK OF ELECTRIC SHOCK.

Appliance must be secured to building structure.

INSTALLATION

ELECTRICAL REQUIREMENTS

DANGER



To avoid electrical shock, this appliance MUST be adequately grounded in accordance with local electrical codes or, in the absence of local codes, with the current edition of the National Electrical Code ANSI/ NFPA No. 70. In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1 or local codes.

An electrical wiring diagram is located in the fryer kettle. The fryer must be installed by a qualified electrician. This appliance must be branch circuit protected with proper ampacities, in accordance with the wiring diagram. The fryer must be properly grounded in accordance with the National Electrical Code and applicable local codes. A means to disconnect the unit must be incorporated into the fixed wiring in accordance with wiring codes.

Wire size for the main incoming power to the unit must match the minimum size listed in the specifications applicable to the specific fryer.

Before operating the fryer, check all cable connections in the electrical connection area for tightness since connections can loosen during transport.

ELECTRICAL

VOLTAGE	PHASE	CYCLE/HZ	AMPS	kW		CORD & PLUG
120	1	60	2.2	0.27		NEMA 5-15P 15A-125V PLUG
230	1	50	1.0	0.23		CEE 7/7 220-230V PLUG

DANGER

ENSURE POWER SOURCE MATCHES VOLTAGE IDENTIFIED ON APPLIANCE RATING TAG.

For CE approved units: To prevent an electrical shock hazard between the appliance and other appliances or metal parts in close vicinity, an equalization-bonding stud is provided. An equalization bonding lead must be connected to this stud and the other appliances / metal parts to provide sufficient protection against potential difference. The terminal is marked with the following symbol.

Hard wired models:

Hard wired models must be equipped with a country certified external allpole disconnection switch with sufficient contact separation.

If a power cord is used for the connection of the product an oil resistant cord like H05RN or H07RN or equivalent must be used.

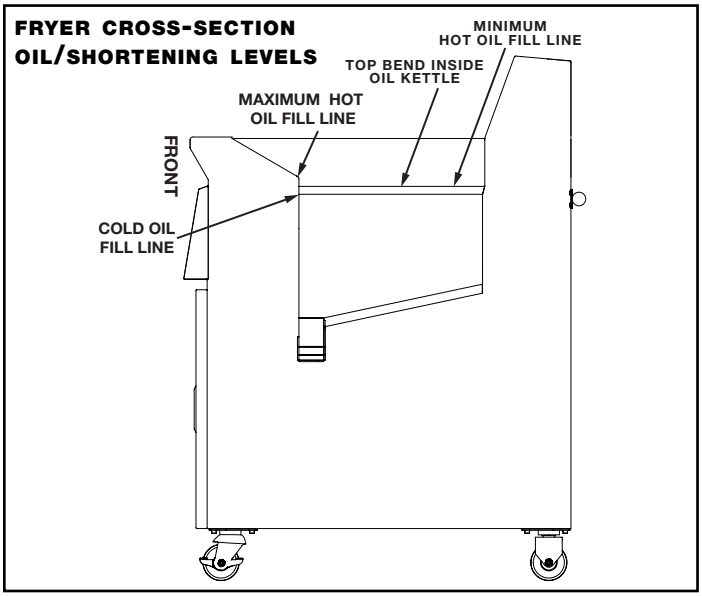
OIL/SHORTENING REQUIREMENTS

Each ASF-60G frypot requires 62-pounds (28 kg) of oil or shortening. Use only quality, high-grade oil/shortening in the fryer. The high moisture content of lower grade shortening will result in excessive foaming and boil over. The cold oil/shortening level requirement for the fryer is indicated below.

CAUTION

Cold oil or shortening expands as the temperature increases. To avoid injury and equipment damage, allow for expansion by filling to the cold oil fill line.

NOTE: ALWAYS maintain the proper level of shortening by adding fresh oil/shortening to the frypot whenever needed.



WARNING

FAILURE TO PLACE SOLID SHORTENING DIRECTLY ON THE BOTTOM OF THE FRYPOT CAN CAUSE SERIOUS EQUIPMENT DAMAGE.

DANGER

FLASH POINT

The flash point of shortening occurs at a lower temperature the longer the shortening is used. Discard any shortening showing signs of deterioration to avoid serious burns, fire, and property damage.

Check the quality of the oil/shortening in the frypots on a daily basis for signs of deterioration. Use an approved test kit. Signs of shortening deterioration include excessive boiling, smoking, foaming, bad taste, and rancid odor. Discard any shortening before it degrades to the point of affecting product quality. Always filter the oil on a regular basis and keep the frypot clean.

CAUTION

ENSURE THERE IS NO WATER IN THE FRYPOT BEFORE FILLING WITH OIL/SHORTENING. WHEN COOKING COMPOUNDS ARE HEATED TO COOKING TEMPERATURE, WATER IN THE FRYPOT WILL CAUSE OIL TO SPLATTER AND MAY BE A BURN HAZARD.

Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

Maximum shortening life is achieved by lowering the temperature of the fryer to 250°F (121°C) or turning the fryer station off when not in use. In multiple-station units, heat only the component fryers necessary to meet cooking needs.

CAUTION

FIRE OR EQUIPMENT DAMAGE CAN RESULT FROM IMPROPER SHORTENING LEVELS. THE LEVEL OF SHORTENING MUST ALWAYS BE ABOVE THE HEAT EXCHANGERS WHEN THE FRYER IS OPERATING. THE REQUIRED SHORTENING LEVEL MUST ALWAYS BE ABOVE THE MINIMUM HOT OIL FILL LINE.

CAUTION

METAL PARTS OF THIS EQUIPMENT BECOME EXTREMELY HOT WHEN IN OPERATION. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN OPERATING THIS APPLIANCE.

OPERATION

START UP & GENERAL OPERATION

DANGER

BEFORE STARTING THE APPLIANCE, MAKE CERTAIN YOU DO NOT DETECT THE ODOR OF GAS.

IF THE ODOR OF GAS IS DETECTED:

- **DO NOT attempt to light any appliance.**
- **DO NOT touch any electrical switches.**
- **Extinguish any open flame.**
- **Use a telephone OUTSIDE THE PROPERTY & IMMEDIATELY contact your gas supplier.**
- **If unable to contact your gas supplier, contact the fire department.**

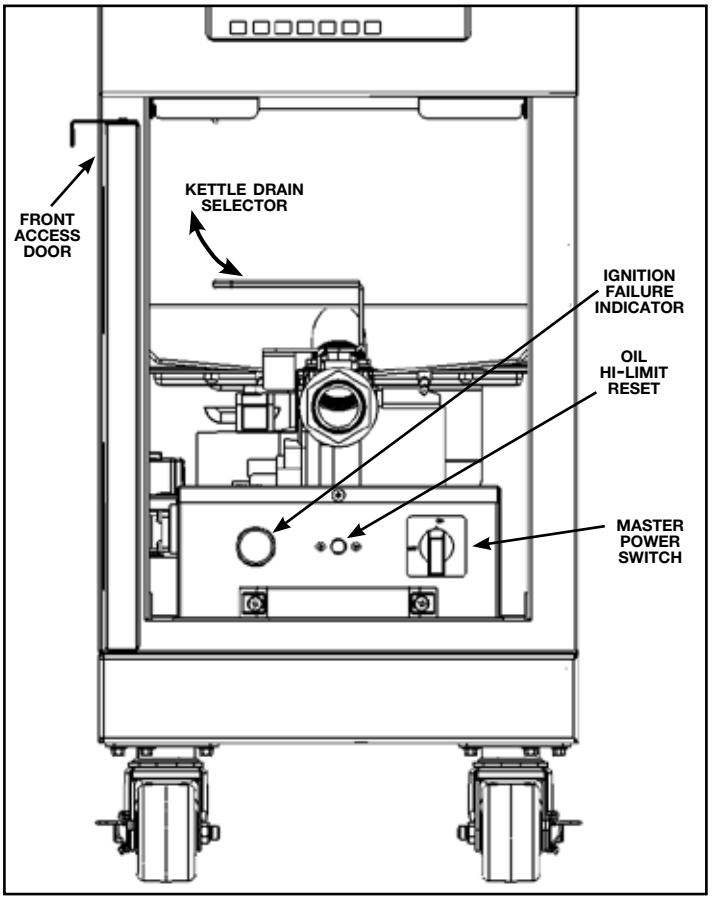
NOTE: Perform an initial Boil-Out to clean and sanitize the fryer before operating.

1. Service is to be performed by an authorized Alto-Shaam service agent.
2. Ensure all local electrical codes, fire codes, and all other requirements such as hood installation have been met in the process of installation.
3. Open front access door and ensure Kettle Drain valve is in the **CLOSED** position. **The handle should be rotated clockwise until it stops.**
4. Fill frypot with frying compound as indicated. (SEE ILLUSTRATION ON THE OIL/SHORTENING REQUIREMENTS PAGE)
5. The Master Power Switch is located behind the front access door. Turn Master Power Switch **"ON."**
6. Press the **ON/OFF** power button on the control.
7. **"READY"** will be displayed when fryer reaches set temperature.

   More detailed operating guidelines along with information on programming are located within this manual.
8. To shutdown the fryer, turn the Master Power Switch located behind the front access door to the **"OFF"** position.

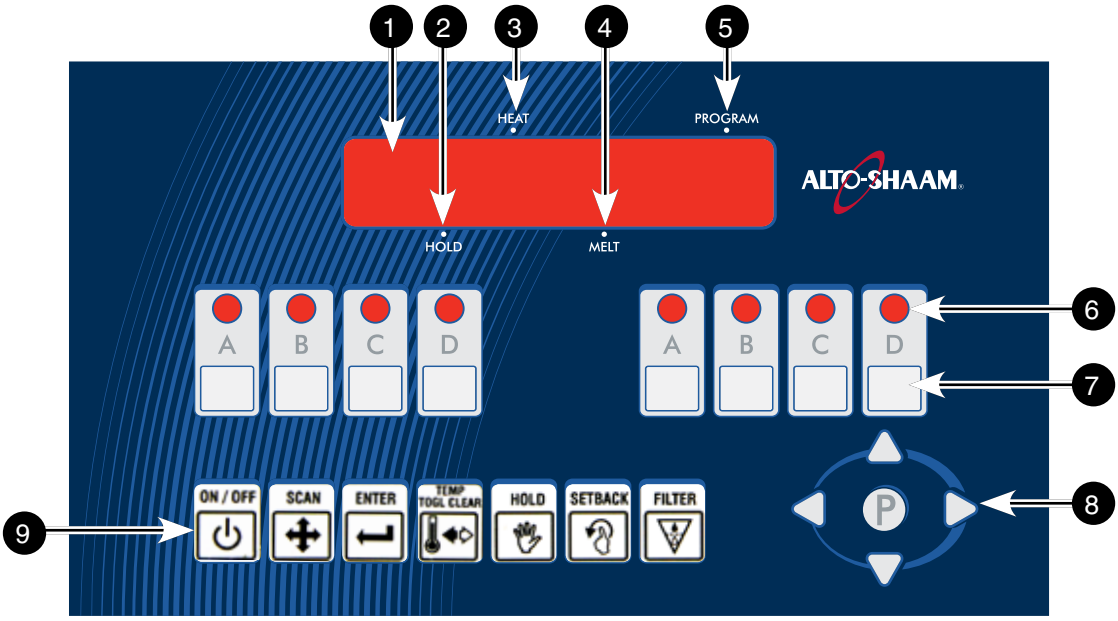
with a hi-limit safety shutoff that will disengage the control if the frying compound temperature in the frypot would ever exceed 406°F (208°C). The **LED** will display **"HI"**, the heat will shut off, the timer will be cancelled, and a constant alarm will sound. In this event, allow the frying compound temperature to drop below 375°F (191°C). Open the front access door and press the **OIL HI-LIMIT RESET** button for a period of 3 seconds to restart the control.

ASF-60G



NOTE: **FOR YOUR PROTECTION** The fryer is furnished

PANEL IDENTIFICATION



1. **LED DISPLAY**
2. **HOLD INDICATOR**
3. **HEAT INDICATOR**
4. **MELT CYCLE INDICATOR**
5. **PROGRAM INDICATOR**
6. **PRODUCT KEY INDICATOR LIGHTS:** Illuminate during active cook cycle or programming mode.
7. **PREPROGRAMMED PRODUCT KEYS:** Press to start a cook cycle. Also used in programming. **REPLACEABLE MENU STRIP:** Make menu changes quickly and easily.
8. **PROGRAMMING CENTER:** Easy cell phone-like programming. Access programming mode and change cooking parameters.
9. **FEATURE KEYS:** Used to access programming functions and controller features

---

FEATURE KEYS

ON/OFF KEY

SCAN KEY: Shows time left between recipe / baskets

ENTER KEY: Used while entering your own menu / time

TEMP TOGGLE CLEAR KEY

HOLD KEY: Displays remaining hold time

SETBACK KEY: Reverts to reduced oil temperature while fryer is idle

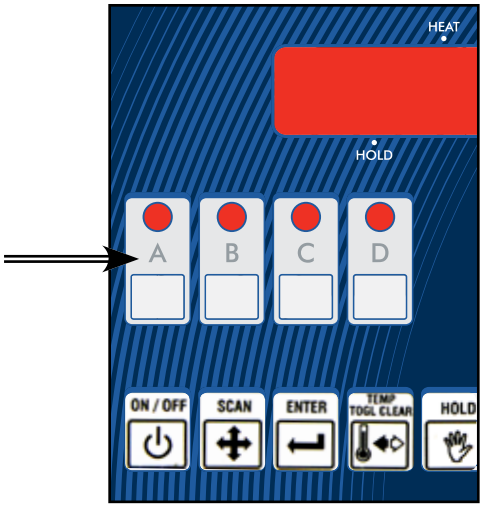
FILTER KEY (NOT ENABLED)

8. LEFT AND RIGHT PRODUCT KEY PROGRAMS:

A - 5:00 minutes
B - 5:20 minutes
C - 5:40 minutes
D - 6:00 minutes

OPERATION

OPERATING THE CONTROL



Start a Cook Cycle

Press any product key to start a cook cycle. If the key is programmed, the cooking time will be displayed and will immediately start to count down in minutes and seconds. *DONE* will display when the cook cycle has ended.

The pressure solenoid will also close if programmed to do so, or a basket lift will lower if so equipped.

If *DONE* is displayed immediately and the unit starts to beep, the product key being pressed is not programmed.

Stop a Cook Cycle

Press and hold an active product key for 3 seconds. Timing will stop, and basket will lift is so equipped.

Respond to a DONE Alarm

Cancel the signal by pressing the same product key used to start the cook cycle.

Action Alarms

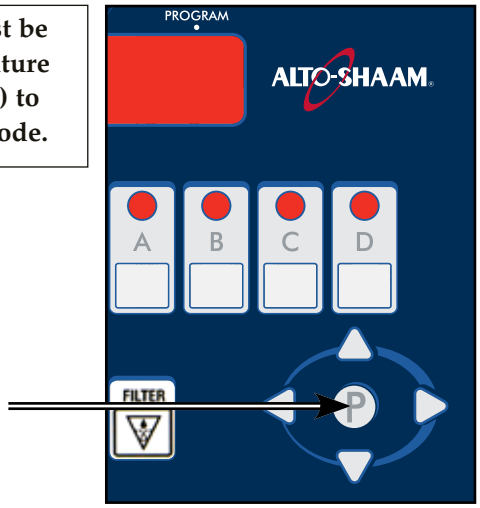
If the controller is programmed for action alarms, they will signal at a preset time during the cooking cycle. The signal, a dual-rhythm beeping, will last 5 seconds and then self-cancel. The display will flash the action alarm time and the controller will start counting toward *0:00*.

BOIL OUT MODE

CAUTION: THE USER MUST CONSULT AND FOLLOW THE GUIDELINES FOR CLEANING AND BOILING OF THE FRY POTS.

The boil function accurately maintains the fryer temperature at 190°F (88°C) to assist in the cleaning of fry vats. To start the boil process, turn the appliance OFF. Empty the fry vat of shortening. Once the vat is emptied of shortening and refilled with cold water, the controller and fryer may now go into boil mode.

The fry vat must be below a temperature of 200°F (93.3°C) to enter the boil mode.



NOTE: The fry vat will maintain a temperature of 190°F (88°C) to allow the boil function to be performed.

To **Enter Boil Mode** : Press and hold the P key for 3 seconds. COUNTS will be displayed.

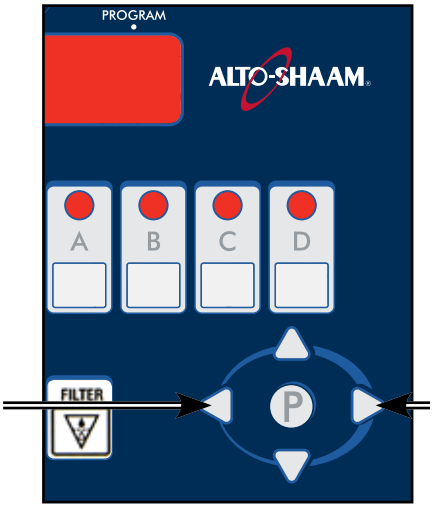
Press the up or down arrow keys until BOIL is displayed, then press the P key. BOIL will be displayed.

To **Exit Boil Mode**, press and hold the P key for 3 seconds. COUNTS will be displayed.

Press the up or down arrow keys until BOIL is displayed, then press the P key. The controller has now exited boil mode. If unit has an ON/OFF, you can also exit by turning the unit OFF then back ON.

OPERATION

PRODUCT COUNTS



To Check Product Counts: press and hold the P key for 3 seconds. *COUNTS* will be displayed.

Press the P key. *PROD1* will be displayed then the number of cooks that were completed on that key. To see the number for each key, continue to press the P key and each product will display *PROD X* then the number of cooks.

Resetting the Product Counts: Once you go through all keys, the display will show *CLRPROD* then *NO*. Use the left and right arrow keys to toggle between *YES* and *NO*. Choose *YES* to reset your product count or *NO* to save the cook counts that have already been completed. Then press the P key.

The display will show *GLOBAL*. This is the total product count of all keys combined. Press the P key again. *CLRGLOBL* then *NO* will be displayed. Use the left and right arrow keys to toggle between *YES* and *NO*. Choose *YES* to reset your total product count or *NO* to save the total cook counts that have already been completed. Then press the P key. *TOTALX10* is displayed, then a number. Press the P key again.

To Exit Product Counts: *COUNTS* will be displayed. Press the up arrow key. *EXIT* will be displayed. Press the P key. The controller will exit programming mode.

Display Descriptions

2:30	Controller is in Operating Mode and a cook cycle is in progress.
- - - - - - - -	Controller is in Operating Mode. Actual vat temperature is within the proper cooking temperature range. The vat is ready to start a cook cycle.
DROP	
READY	
ALMTIME1	Action alarm status is displayed.
APPLIANC	Controller is in Appliance Type Programming Mode.
CODE	Controller is waiting for a pass code to be entered.
DONE	Controller is in Operating Mode and a cook cycle has been completed.
HI	Controller is in Operating Mode. The actual vat temperature is more than 40 degrees above the highest programmed vat temperature. A continuous audible alarm will sound.

DISPLAY DESCRIPTIONS (CONTINUED)

Operating Instructions

LO	Controller is in Operating Mode. Actual vat temperature is more than 10 degrees below the programmed vat temperature.
PROBE	Controller's probe is either open or shorted. Display will be accompanied with an audible alarm if shorted. Check or replace the probe.
PRODUCT	Controller is in Product Key Programming Standby mode.
SYSTEM	Controller is in System Programming Standby Mode.
TEMP	Stage cooking temperature.
TEMPUNIT	Controller is in Fahrenheit or Celsius Programming Mode.
TIME	Stage cooking time.
TIMING	Stage timing mode (flex or straight).

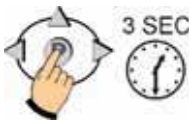
Product Key Programming

10 button controllers have a single, dual-purpose display that will alternate information; for example:

TIME then 2:00

RECIPE PROGRAMMING CODE (left A, right A, left B, left D) MANAGER

ENTER PROGRAMMING MODE.
Press and hold the P key for 3 seconds.



COUNTS

Press the down arrow key.

PROGRAM

PROGRAM will be displayed. Press the P key.

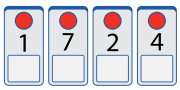
OPERATION

PRODUCT KEY PROGRAMMING (CONTINUED)

Depending on model, you can either press the P key to change all programmable settings or you can scroll using the arrow keys to any of the specific options.

CODE

Type in 1 7 2 4 using the product keys. Press the P key.

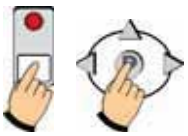


RECIPE

Press the P key. All product key LEDs will light up.

PRODUCT

PROGRAM A PRODUCT KEY. Press the product key you want to program. Press the P key.

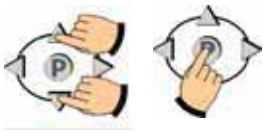


ALL

Press the P key.

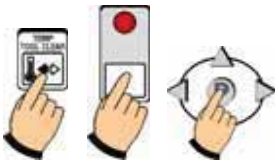
NAME
XXXXXXXX

SET PRODUCT DISPLAY NAME. NAME will be displayed then the actual product name. Use the up and down arrow keys to scroll through the library. Press the P key to lock in your choice.



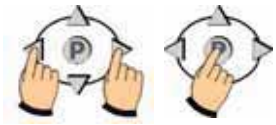
TIME
XX:XX

SET COOK TIME. Actual set time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



TIMING
STRAIGHT
FLEX
SENSITIV

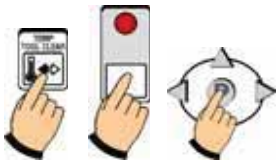
SET TIMING MODE. Use the left and/or right arrow keys to choose Straight, Flex or Sensitivity. Press the P key.



ALMTIME1
XX:XX

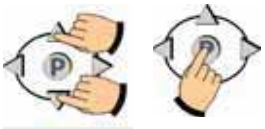
SET ACTION ALARM

Actual alarm time 1 will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



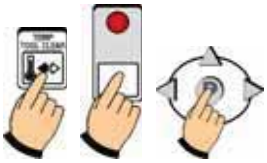
ALMNAME1
XXXXXXXX

SET ACTION ALARM NAME. ALMNAME1 will be displayed, then the actual action alarm name. Use the up and down arrow keys to scroll through the library. Press the P key to either go to next action alarm name, or continue through programming.



HOLDTIME
XX:XX

SET HOLD TIME. Actual hold time will be displayed. To change, press toggle clear to change the time to zero. Type in a new time using the product keys. Press the P key.



ALL

EXIT PROGRAMMING MODE. Press the up arrow key.

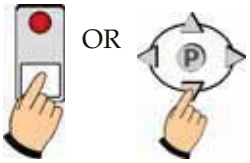
EXIT

Press the P key.

PRODUCT KEY PROGRAMMING (CONTINUED)

PRODUCT

Either press another product key to program and repeat the programming instructions, or continue by pressing the down arrow key.



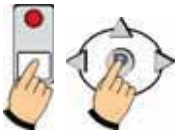
SET TEMP

SET GLOBAL TEMPERATURE. Press the P key.

SET TEMP

XXXF

SET TEMP, then Actual Temp will be displayed. To change, use the number keys and then press the P key.



NOTE: If you have a two-probe unit, the display will show SETTEMPL (Left) and then SETTEMPR (Right). You will have the option to change the temperature on both sides.

To Exit, press the down arrow key.

EXIT

Press the P key.

RECIPE

Press the up arrow key.

EXIT

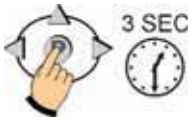
Press the P key.

OPERATION

SYSTEM PROGRAMMING

SYSTEM CODE (left C, left B, left B, right B) MANAGER

ENTER SYSTEM PROGRAMMING MODE.
Press and hold the P key for 3 seconds.



COUNTS

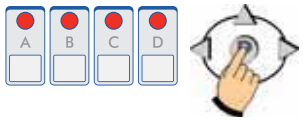
Press the down arrow key.

PROGRAM

PROGRAM will be displayed. Press the P key.

CODE

Type in left C, left B, left B, right B using the product keys. Press the P key.



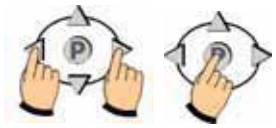
SYSTEM

Press the P key.

APPLIANC

GAS
ELEC
GEN

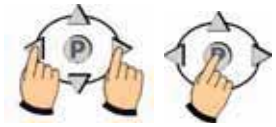
SET APPLIANCE MODE. Use the left and/or right arrow keys to choose Gas, Electric or Generic. Press the P key.



CTRTYPE

TEMPCTRL
TIMECTRL

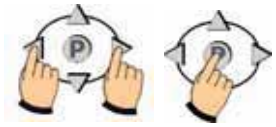
SET CONTROL TYPE. Use the left and/or right arrow keys to choose Temperature or Time Control. Press the P key.



TEMPUNIT

F
C

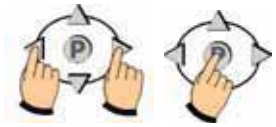
SET TEMPERATURE SCALE. Use the left and/or right arrow keys to choose Fahrenheit (F) or Celsius (C). Press the P key.



PREHEAT

YES
NO

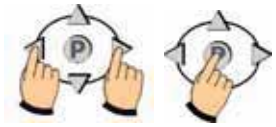
SET PREHEAT MODE. Use the left and/or right arrow keys to choose Yes or No. Press the P key.



COOKUNIT

MM:SS
HH:MM

SET COOK TIME UNIT. Use the left and/or right arrow keys to choose Minutes/Seconds or Hours/Minutes. Press the P key.



SYSTEM

EXIT SYSTEM PROGRAMMING MODE. Press the up arrow key.

EXIT

Press the P key.

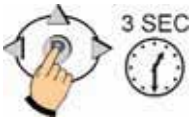
READY

You have now EXITED System Programming Mode and can operate the controller.

PROGRAMMING CUSTOM PRODUCT AND ACTION ALARM NAMES TO THE LIBARY

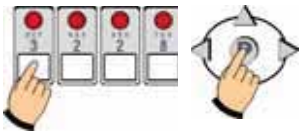
SYSTEM CODE (left C, left B, left B, right B) MANAGER

ENTER LIBRARY PROGRAMMING MODE. Press and hold the P key for 3 seconds.

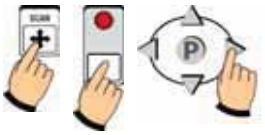


CODE

Type in 3 2 2 8 using the product keys. Press the P key.



A flashing dash will be displayed. Press the SCAN key and use the product keys to spell a new word. Press the right arrow key to advance to the next character position.



ADD

CANCEL

MODIFY

TO CANCEL OR MODIFY WORD, press the left or right arrow keys to select CANCEL or MODIFY.

EXIT

Press the P key.

COUNTS

Press the down arrow key.

SYSTEM

Press the down arrow key to select either PRODLIBR OR ALRMLIBR.

AB

Continue spelling the word. When done, press the P key.

IF YOU CHOOSE CANCEL:

CANCEL

Press the P key to EXIT and cancel the word.

IF YOU CHOOSE MODIFY:

MODIFY

Press the SCAN key to go back and modify the word.

READY

You have now EXITED Library Programming Mode and can operate the controller.

PROGRAM

PROGRAM will be displayed. Press the P key.

PRODLIBR

ALRMLIBR

Choose either PRODLIBR (Product Library) or ALRMLIBR (Action Alarm Library) by pressing the P key.

ADD

TO SAVE WORD, press P again. Skip to Exit Library Programming.

TO CANCEL OR MODIFY, see next step.

PRODLIBR

ALRMLIBR

EXIT LIBRARY PROGRAMMING. Press the up or down arrow keys until display reads EXIT.

OPERATION

ALL SUGGESTED FRYING TIMES ARE BASED ON A FULL LOAD OF PRODUCT

Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

SUGGESTED FRYING TIMES

	ITEM	MINUTES	TEMPERATURE	DISPLAY
PROGRAM KEYS	**1. Fries (FROZEN)**	**3:30**	**350°F (177°C)**	Fries
	2. Chicken Nuggets (FROZEN)	**3:30**	**350°F (177°C)**	Nuggets
	3. Fish, Breaded (FROZEN)	**4:30**	**350°F (177°C)**	Fish
	4. Chicken Pieces, Breaded (FRESH)	**17:00**	**340°F (171°C)**	Chicken
	5. PRODUCT A			ProductA
	6. PRODUCT B			ProductB

ITEM	MINUTES	TEMPERATURE
Appetizer	3:30	350°F (177°C)
Breaded Cauliflower	3:30	340°F (171°C)
Breaded Fish	Per pkg. instructions	340°F (171°C)
Breaded Mac & Cheese	3:30	340°F (171°C)
Breaded Mushrooms	3:30	340°F (171°C)
Broccoli Cheese Nuggets	2:30	350°F (177°C)
Cheese Cake, Fried	8:30	350°F (177°C)
Cheese Nuggets	1:30	350°F (177°C)
Chicken Breasts (FRESH)	12:00-17:00	315°F (157°C)
Chicken Breasts (FROZEN)	20:00	330°F (166°C)
Chicken Fried Steak	4:00	350°F (177°C)
Chicken Gizzards (FRESH)	3:30	350°F (177°C)
Chicken, Legs & Wings (FRESH)	12:00-17:00	315°F (157°C)
Chicken Legs (FROZEN)	18:00	330°F (166°C)
Chicken, Patty	6:00	350°F (177°C)
Chicken Pieces - MRB (FROZEN)	17:00	340°F (171°C)
Chicken Strips	6:00	340°F (171°C)
Chicken Tenderloins (FRESH)	3:00	350°F (177°C)
Chicken Tenders, Breaded (FROZEN)	3:30	350°F (177°C)
Chicken Wings (FRESH)	3:30	350°F (177°C)
Chicken Wings (FROZEN)	15:00	330°F (166°C)
Clam Strips	2:00	340°F (171°C)
Corn Dogs	10:00	350°F (177°C)
Cream Cheese Jalapeño Poppers	3:30	340°F (171°C)

THE TIMES AND TEMPERATURES ARE SUGGESTED GUIDELINES ONLY. ALL COOKING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. DUE TO VARIATIONS IN PRODUCT QUALITY, WEIGHT, AND DESIRED DEGREE OF DONENESS, THE COOKING TIMES AND TEMPERATURES MAY NEED TO BE ADJUSTED ACCORDINGLY. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.

ALL SUGGESTED FRYING TIMES ARE BASED ON A FULL LOAD OF PRODUCT

Remove ice crystals and ensure that food is dry before frying. Excessive water and ice can cause oil to splatter or overflow. Do not over fill the basket. Food needs to be surrounded by oil for best frying results.

SUGGESTED FRYING TIMES

ITEM	MINUTES	TEMPERATURE
Eggplant	4:00	340°F (171°C)
Egg Rolls (FROZEN)	5:00	340°F (171°C)
Fries, Crinkle-Cut	5:00	340°F (171°C)
Fries, Seasoned	4:00	340°F (171°C)
Fries, Sour Cream & Chive	4:00	340°F (171°C)
Fries (FRESH)	5:00	340°F (171°C)
Fries, Thin Cut	3:30	340°F (171°C)
Hash Brown Circles	4:00	340°F (171°C)
Jalapeno Peppers, Stuffed	4:00	350°F (177°C)
Mozzarella Sticks, Battered or Breaded	Per pkg. instructions	340°F (171°C)
Mushrooms, Breaded	3:30	350°F (177°C)
Onion Rings	3:00	340°F (171°C)
Pork Chops (FRESH)	10:00	340°F (171°C)
Pork (FRESH)	12:00	340°F (171°C)
Potato Chips (fresh)	2:45	325°F (163°C)
Potato Wedges	3:00	350°F (177°C)
Quesadilla Rolls	3:30	350°F (177°C)
Shrimp	3:30	340°F (171°C)
Vegetables	3:00	350°F (177°C)
Zucchini, Breaded (FRESH)	3:30	350°F (177°C)

THE TIMES AND TEMPERATURES ARE SUGGESTED GUIDELINES ONLY. ALL COOKING SHOULD BE BASED ON INTERNAL PRODUCT TEMPERATURES. DUE TO VARIATIONS IN PRODUCT QUALITY, WEIGHT, AND DESIRED DEGREE OF DONENESS, THE COOKING TIMES AND TEMPERATURES MAY NEED TO BE ADJUSTED ACCORDINGLY. ALWAYS FOLLOW LOCAL HEALTH (HYGIENE) REGULATIONS FOR ALL INTERNAL TEMPERATURE REQUIREMENTS.

CLEANING

DAILY CLEANING & MAINTENANCE

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

DANGER

TO AVOID SERIOUS PERSONAL INJURY DO NOT STAND ON THE FRYER OR FRYER COVER. THE FRYER COVER IS DESIGNED TO HOLD A MAXIMUM OF 10-POUNDS (4,5 KG) OF WEIGHT.

THOROUGHLY CLEAN DAILY

The cleanliness and appearance of this unit will contribute considerably to operating efficiency and savory, appetizing food. Good equipment kept clean works better and lasts longer.

1. Disconnect unit from power source, and let cool.
2. Remove all detachable items. Clean these items separately with a good grease solvent or commercial detergent. Rinse well and dry.
3. Clean control panel, door hinges, and door handles thoroughly since these areas harbor food debris. Rinse by wiping with sponge and clean warm water. Wipe dry with a clean cloth.
4. To help maintain the protective film coating on polished stainless steel, clean the exterior of the unit with a cleaner recommended for stainless steel surfaces. Spray the cleaning agent on a clean cloth and wipe with the grain of the stainless steel.

NOTE: Avoid the use of abrasive cleaning, compounds, chloride based cleaners, or cleaners containing quaternary salts. Never use hydrochloric acid (muriatic acid) on stainless steel.

Always follow appropriate state or local health (hygiene) regulations regarding all applicable cleaning and sanitation requirements for foodservice equipment.

DANGER

AT NO TIME SHOULD THE INTERIOR OR EXTERIOR BE STEAM CLEANED, HOSED DOWN, OR FLOODED WITH WATER OR LIQUID SOLUTION OF ANY KIND. DO NOT USE WATER JET TO CLEAN.

SEVERE DAMAGE OR ELECTRICAL HAZARD COULD RESULT.

WARRANTY BECOMES VOID IF APPLIANCE IS FLOODED

⚠ CAUTION

TO PROTECT STAINLESS STEEL SURFACES, COMPLETELY AVOID THE USE OF ABRASIVE CLEANING COMPOUNDS, CHLORIDE BASED CLEANERS, OR CLEANERS CONTAINING QUATERNARY SALTS. NEVER USE HYDROCHLORIC ACID (MURIATIC ACID) ON STAINLESS STEEL. NEVER USE WIRE BRUSHES, METAL SCOURING PADS OR SCRAPERS.

BOIL-OUT PROCEDURE

NOTE: Perform an initial boil-out to clean and sanitize the fryer before operating.

Carbonized deposits along with an accumulation of oil will eventually build-up on the interior of the frypot as well as fryer accessories. It is important to periodically remove these deposits, not only to maintain fryer efficiency, but also to provide the highest product quality.

NOTE: Always wear eye protection or a face shield and protective rubber gloves when cleaning the frypot as boil-out chemical is an alkaline solution and can cause severe burns.

NOTE: Because each fryer is controlled separately, the following procedure must be followed for every unit in multiple-fryer units.

CAUTION

BEFORE ENTERING THIS PROGRAM, MAKE CERTAIN THE FRYPOT IS EMPTY OF ALL OIL OR SHORTENING.

CAUTION

TO AVOID DAMAGING THE PUMP AND CONTAMINATING CLEAN OIL WITH BOIL-OUT CHEMICAL ON UNITS EQUIPPED WITH A FILTRATION SYSTEM, NEVER ALLOW BOIL-OUT SOLUTION OR RINSE WATER TO CIRCULATE THROUGH THE FRYER PUMP SYSTEM.

CAUTION

BOIL-OUT SOLUTION AND SURROUNDING METAL SURFACES BECOME EXTREMELY HOT. TO AVOID BURNS, ALWAYS USE HAND PROTECTION WHEN PERFORMING THE BOIL-OUT FUNCTION AND FOLLOW THE MANUFACTURER'S SAFETY INSTRUCTIONS FOR THE BOIL-OUT PRODUCT BEING USED.

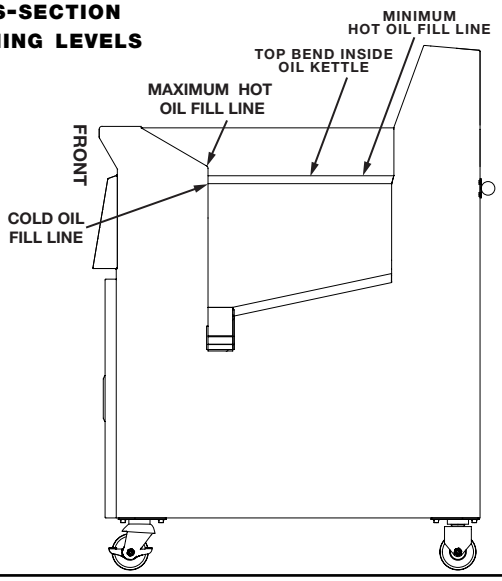
CAUTION

DO NOT LEAVE THE FRYER UNATTENDED DURING THE BOIL-OUT PROCESS. THE FRYER MUST BE CONTINUOUSLY MONITORED FOR BOIL-OVER CONDITIONS, PARTICULARLY IN HIGH-ALTITUDE LOCATIONS.

NOTE: Manual Boil-Out can only be performed when the actual temperature of the frypot is less than 200°F (93°C).

1. Place the mobile oil drawer or heat safe container under the drain. Rotate drain valve to **"OPEN"** to drain oil. If equipped with the optional oil hand wand, use the wand to pump oil into the frypot to further rinse food particles out of the frypot. Carefully disconnect the wand from fryer and drain any residual oil from the wand into the frypot and then drain the remaining oil from frypot.
2. While wearing heat resistant gloves, wipe excess oil out of inside of frypot with paper towel or clean rag.
3. If oil has been drained into a mobile oil drawer, empty the oil from the drawer. Wash the oil drawer, rinse with clean water, and dry drawer thoroughly.
4. Open the front access door. If equipped with a filtration system, rotate the Kettle/Nozzle selector to the **"KETTLE"** position, then rotate the drain valve clockwise until rotation stops and the drain valve is **"CLOSED."**
5. Fill the fryer to the maximum oil fill line with water.

FRYER CROSS-SECTION OIL/SHORTENING LEVELS



CLEANING

BOIL-OUT PROCEDURE

CAUTION

KEEP A CONTAINER OF COLD WATER ON HAND DURING BOIL-OUT IN CASE OF BOIL-OVER. IF BOIL-OVER IS IMMINENT, IMMEDIATELY POUR COLD WATER INTO FRYPOT TO QUICKLY REDUCE SOLUTION TEMPERATURE. TURN OFF MASTER POWER SWITCH AND ALLOW SOLUTION TO COOL. WHEN THE SOLUTION HAS COOLED, RE-ENTER THE BOIL-OUT MODE.

6. Add boil out solution. Carefully follow the manufacturer's directions for mixing the boil-out solution.
7. Turn the Master Power Switch (located behind the front access door) to the **"ON"** position and press the **CONTROL RESET**.
8. To enter Boil Mode, press and hold the P key for 3 seconds. **"COUNTS"** will be displayed.
9. Press the up or down arrow keys until **"BOIL"** is displayed, then press the P key . **"BOIL"** will be displayed. Using a separate timer, allow the frypot to boil-out for 10 minutes.
10. After the 10 minute boil-out period, turn the Master Power Switch located behind the front access door to the **"OFF"** position.
11. Wearing protective gloves to avoid burns, scrub the inside of the fypot with a long-handled scrub brush.
12. Place another empty and dry mobile oil drawer or heat safe container under the drain. Rotate the drain to the **"OPEN"** position. **The handle should be rotated counterclockwise until it stops.** Allow the boil-out solution to completely drain into mobile oil drawer or a heat safe container. Discard boil-out solution. Return the drawer to the fully-inserted position beneath the fryer.
13. Making sure the drain is **"OPEN"**, rinse all boil-out solution from fry pot, drain, burner holes, etc. Follow the boil-out solution manufacturer's additional boil-out instructions to rinse the frypot in order to neutralize boil-out cleaner residue. Discard rinse solution.
14. There may be residual boil-out solution in the oil fill-hole and tube. This must be flushed out and discarded separately before filling the tank with new oil to avoid contamination of new oil.

    For filtration-equipped fryers: Place a small amount of clean, liquid oil in the clean fat drawer. Pump a small amount of oil through the the system. While wearing heat resistant gloves, catch the oil that is pumped through the fill hole inside frypot with paper towel. Drain the oil. Rinse fry pot with a small amount of water.

    For units without a pump or filtration system: Pour a small amount of oil into the the fryer and drain it into a separate container. Rinse frypot and frypot drain with water.

CAUTION

ENSURE THERE IS NO WATER IN THE FRYPOT BEFORE FILLING WITH OIL/SHORTENING. WHEN COOKING COMPOUNDS ARE HEATED TO COOKING TEMPERATURE, WATER IN THE FRYPOT WILL CAUSE OIL TO SPLATTER AND MAY BE A BURN HAZARD.

15. Following the boil-out and rinse procedure, wipe dry all accessible interior metal surfaces and interior accessories with a clean, dry cloth to remove remaining moisture. Clean and dry the fry baskets separately.

NOTE: Make sure the inside of the frypot, the drain opening and all parts that come into contact with new oil/shortening are as dry as possible.

16. Wipe the exterior of the fryer cabinet with a degreaser/sanitizer suitable for use on food contact surfaces. Always follow the manufacturer's instructions and/or mixing directions for proper solution strengths.

    Wipe exterior stainless steel surfaces with the grain of the metal and avoid the use of abrasive pads, steel wool, or metal implements.
17. Rotate drain to **"CLOSED"** position.
18. Fill tank with new oil or shortening.

CONTROL TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
No power	Circuit breaker OFF	Check and reset
	Appliance not plugged in	Plug in cord
	Defective 24VAC transformer	Replace transformer Replace controller
No sound	Inoperable speaker	Replace controller
Button problem	Inoperable key	Replace controller
PROBE is displayed	Defective temperature probe	Replace temperature probe
	Probe not plugged in	Plug in probe
Reading wrong temperature	Defective temperature probe	Replace temperature probe.
Not heating	Defective element, relay, contactor or gas valve	Replace defective part
	Defective controller	Replace controller

UNIT TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
No power	Circuit breaker OFF	Check and reset
	Appliance not plugged in	Plug in cord
	Drain switch turned to the "OPEN" position	Turn drain switch to the "CLOSED" position
	Master switch turned to the "OFF" position	Turn master switch to the "ON" position
Fryer will not heat	Gas valve is in the "OFF" position	Turn gas valve to the "ON" position
	Gas hose is not connected	Connect gas hose
	Hi-limit is tripped	Press the hi-limit reset button located behind the front access door
	No oil in frypot	Add oil to frypot
Baskets will not drop	Fuse is blown on basket lift relay board	Replace fuse
	Interference with basket lift mechanism	Check basket lift mechanism and remove interference

SERVICE

CAUTION

THIS SECTION IS PROVIDED FOR THE ASSISTANCE OF QUALIFIED SERVICE TECHNICIANS ONLY AND IS NOT INTENDED FOR USE BY UNTRAINED OR UNAUTHORIZED SERVICE PERSONNEL.

⚠ DANGER

DISCONNECT UNIT FROM POWER SOURCE BEFORE CLEANING OR SERVICING.

CAUTION

IT IS RECOMMENDED THIS APPLIANCE BE INSPECTED BY A QUALIFIED SERVICE TECHNICIAN AT REGULAR INTERVALS AS PART OF A STANDARD KITCHEN MAINTENANCE PROGRAM.

EXTENDED LIMITED FRYPOT WARRANTY

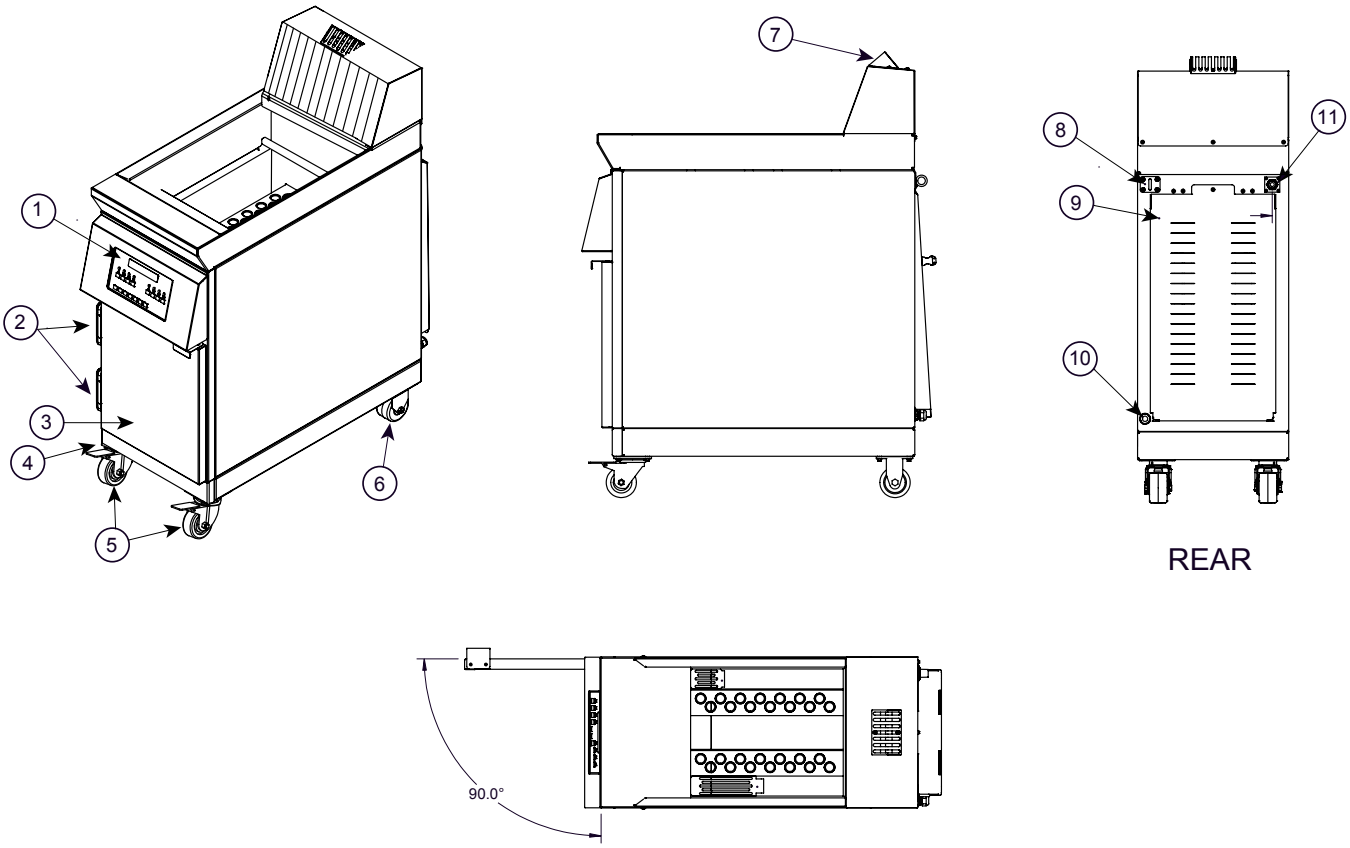
Alto-Shaam, Inc. warrants to the original purchaser that any frypot that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt frypot.

The labor warranty remains in effect for three (3) years from the shipping date. Alto-Shaam will bear shipping and normal labor charges for installation performed during standard business hours, and excluding overtime, holiday rates or any additional fees.

The parts warranty remains in effect for seven (7) years from the shipping date. Following the initial three (3) year labor warranty, Alto-Shaam will replace the frypot only, with freight, labor and all additional charges at the full responsibility of the owner/operator.

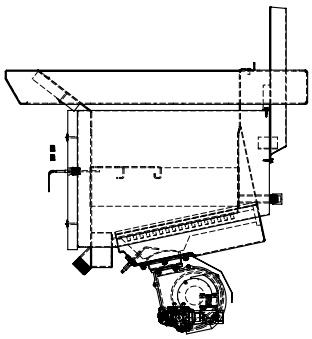
Extended frypot warranty coverage is subject to all remaining provisions as set forth in Alto-Shaam's standard published warranty.

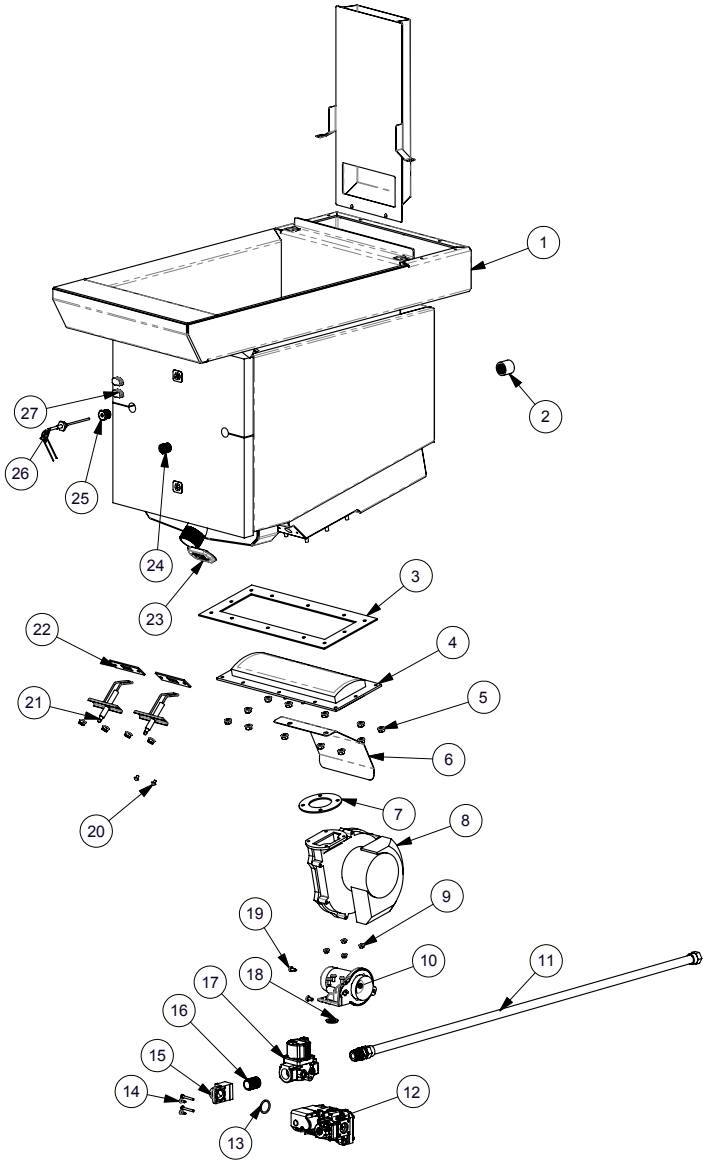
ASF-60G - IN & OUT



ITEM	P/N	DESCRIPTION	QTY
1	PE-29469	Panel Overlay	1
2	HG-2015	Hinge Assembly	2
	SC-2072	Screws for Hinge Assembly	6
3	5014682	Door Assembly with Hinges	1
4	1012713	Caster Plate	4
5	CS-29730	Caster, 3-1/2” Blue, Swivel with brake	2
	SC-28256	Screws for Casters	12
6	CS-29731	Caster, 3-1/2” Blue, Rigid	2
7	1012783	Exhaust Vent	1
8	BT-26884	Bracket, Tether Restraint	1
9	5015782	Panel, Back	1
10	BU-3964	Bushing, Electrical Connection	1
11	FT-27961	Fitting, Gas Connection, 1/2”	1

ASF-60G KETTLE ASSEMBLY – 5009482 SHOWN

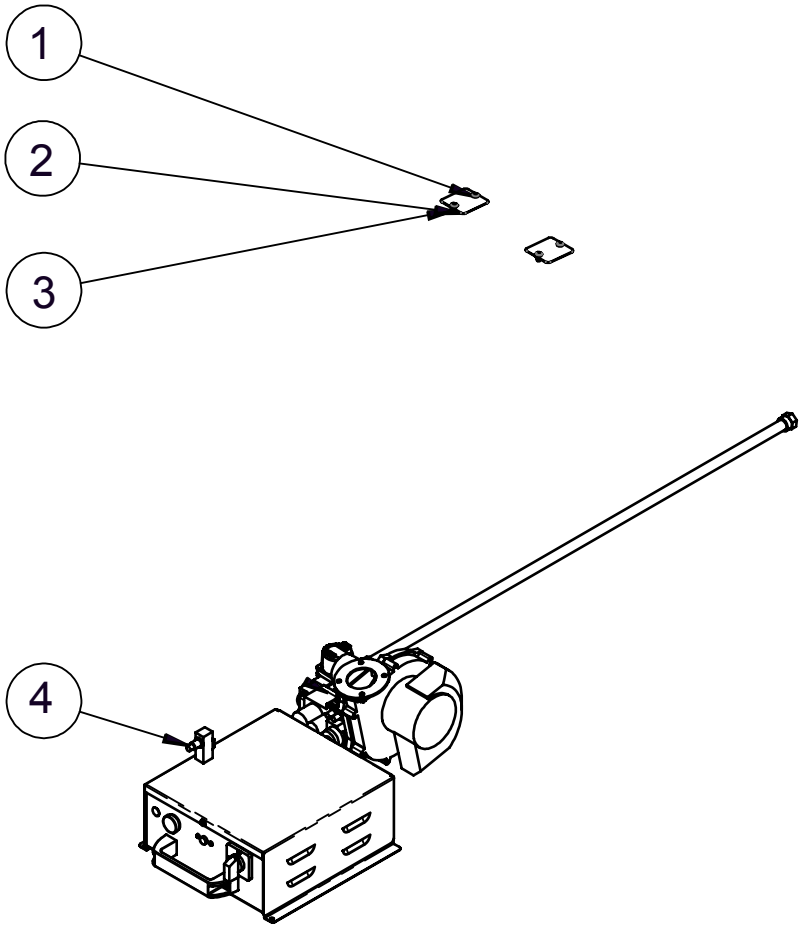




ITEM	P/N	DESCRIPTION	QTY
1	5009432	Kettle	1
2	CP-29478	Cap, 1/2" NPT	1
3	SA-27005	Seal, Gas Burner	1
4	BN-34226	Burner, HE Gas Fryer	1
5	NU-29475	Nut, 1/4"-20 KEPS	16
6	1012657	Guard, Drip Combustion Fan	1
7	SA-27006	Seal, Fan Burner	1
8	FA-34232	Fan, Gas Fryer, 120V	1
9	NU-27851	Nut, Hex, 5mm with Star Washer	4
10	VA-27068	Valve, Venturi	1
11	HO-28689	Hose, 1/2" I.D., Corrugated	1
12	VA-34260	Valve, Gas Control Flanged Side	1
13	OR-27249	O-Ring, 0.812 O.D. x .94 Diameter	1
14	SC-22273	Screw, Pan Head, M4 x 6mm	2
15	VA-27081	Elbow, Flange, Venturi	1
16	NP-26220	Nipple, 1/2"-14 NPT	1
17	VA-34531	Gas Valve, 24V, 120V, 1/2 NPT	1
18	SA-27930	Seal, Gas Valve	1
19	SC-22766	Screw, Pan Head Phillips	5

ITEM	P/N	DESCRIPTION	QTY
20	SC-2459	Screw, Phillips, 8-32	2
21	PI-27001	Pin, Flame Sensor	2
22	SA-27007	Seal, Spark Plug	2
23	GL-29744	Sight Glass	1
24	BU-27277	Bushing, Reducing	1
25	BU-29470	Bushing, SS, Reducing	1
26	PR-34998	Probe, Temperature Sensor	1
27	CR-34967	Connector, 2 Conductor	2

ASF-60G 120V ELECTRICAL PACKAGES



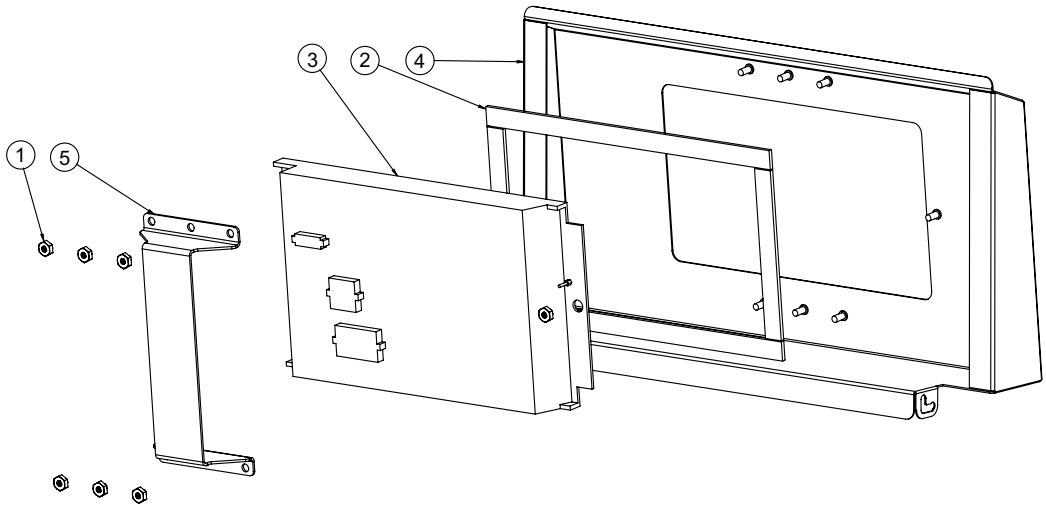
REFERENCE DRAWING 5014939

ITEM	P/N	DESCRIPTION	Qty
1	SC-22766	Screw, M5 Pan Head	4
2	1013188	Lift Hole Cover Plate	2
3	NU-22289	Nut, M5 Hex	4
4	SW-33148	Switch, Snap Action	1

SERVICE

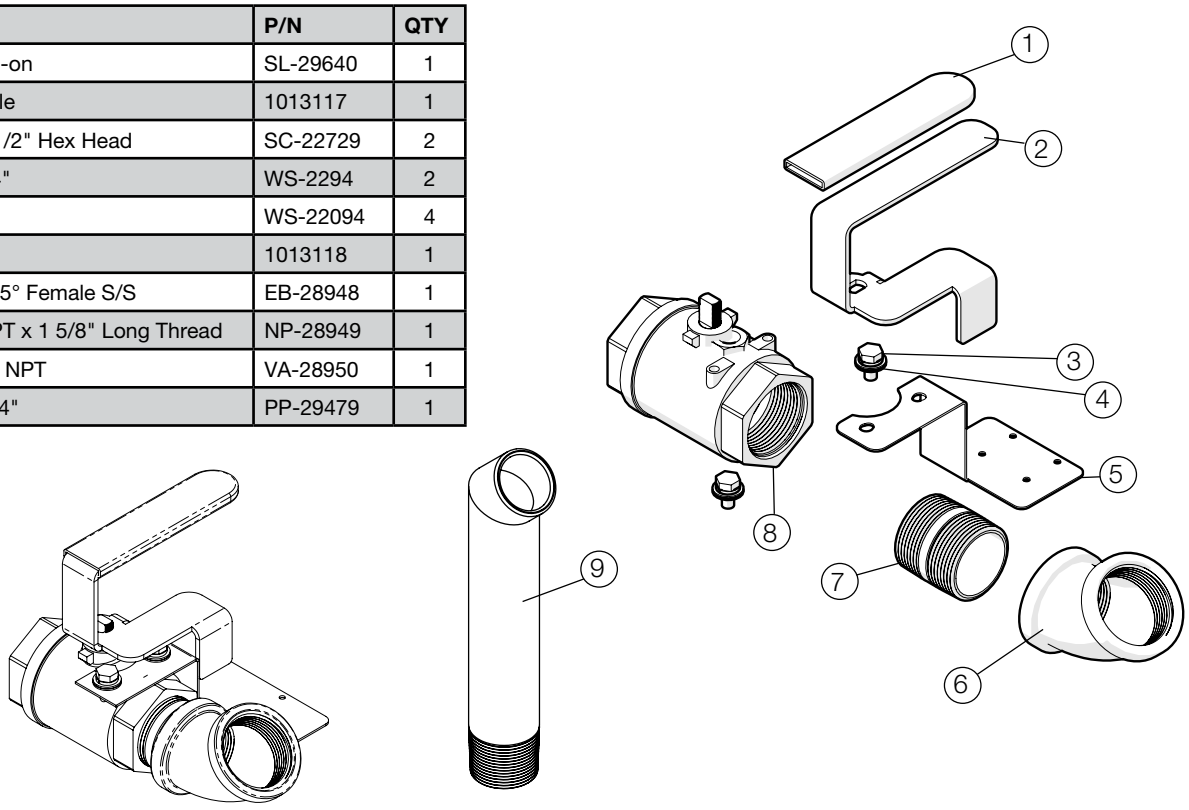
CONTROL PANEL ASSEMBLY, ASF-60G – 5013197 SHOWN

ITEM	DESCRIPTION	P/N	QTY
1	Nut, #8-32 UNC KEPS ZP	NU-26526	8
2	1/2" Self Adhesive Gasket 3ft	GS-2019	1
3	Control, ASF-60 In & Out, 10 Button	CC-34996	1
4	Weldment, Control Panel 15"	5013196	1
5	Bracket, Controller Support	1011993	1
6*	Cable Harness Control	CB-34999	1



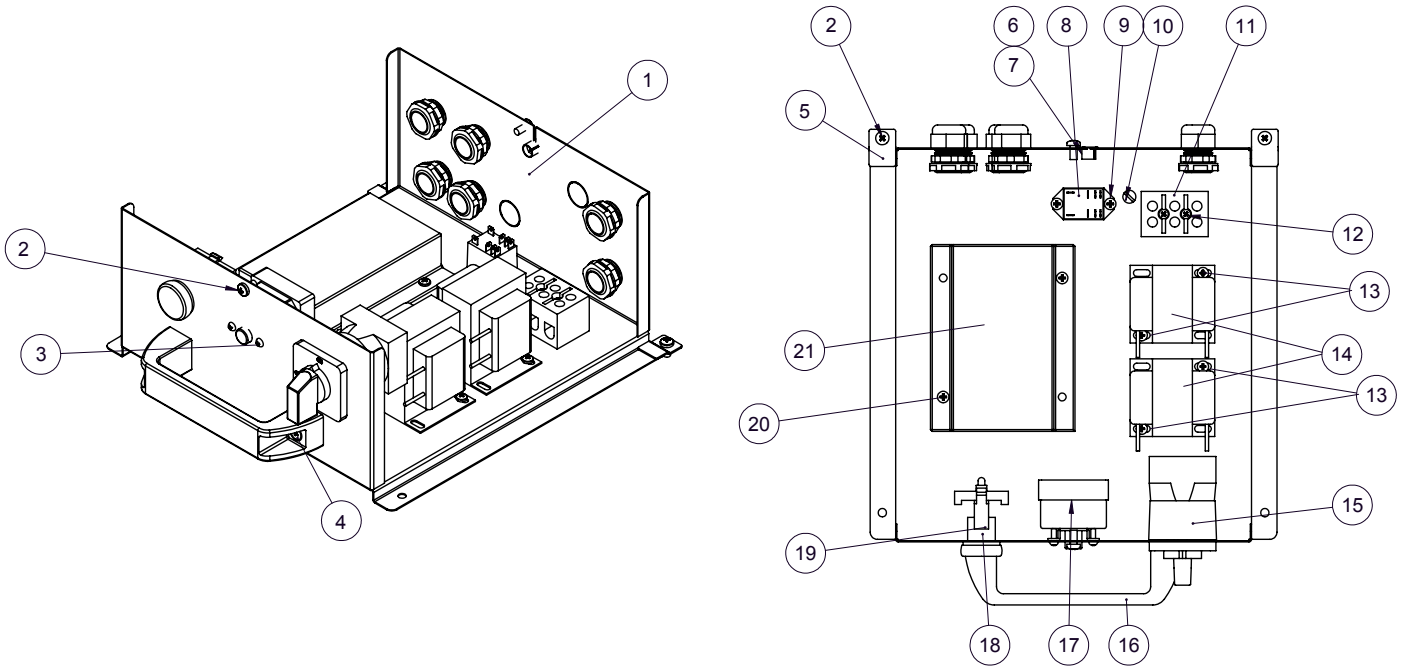
VALVE DRAIN ASSEMBLY, ASF-60G – 5014881 SHOWN

ITEM	DESCRIPTION	P/N	QTY
1	Handle, Vinyl Slip-on	SL-29640	1
2	Drain Valve Handle	1013117	1
3	Screw, 1/4-20 x 1/2" Hex Head	SC-22729	2
4	Lock Washer, 1/4"	WS-2294	2
	Flat Washer, 1/4"	WS-22094	4
5	Switch Bracket	1013118	1
6	Elbow, 1-1/4" x 45° Female S/S	EB-28948	1
7	Nipple, 1-1/4" NPT x 1 5/8" Long Thread	NP-28949	1
8	Ball Valve, 1-1/4" NPT	VA-28950	1
9	Pipe - Drain, 1-1/4"	PP-29479	1



Part numbers and drawings are subject to change without notice.

ELECTRICAL ASSEMBLY, 120V – ASF-60G



120V CONFIGURATION
REFERENCE DRAWING 5014823

ITEM	P/N	DESCRIPTION	Qty
*	77450	120V Wiring Diagram	1
1	1013069	120V Electrical Box	1
*	1013070	Electrical Box Cover	1
2	SC-22766	Screw, M5	4
3	SC-2254	Screw, 6-32 x 3/8" Round Pan Head	2
4	SC-22466	Screw, Philips, 1/4-20 x 1"	2
5	1008588	Bracket, Chimney Holding	2
6	BU-2827	Bushing, Bearing, Nylon	1
7	SA-2924	Seal	1
8	RL-35000	Relay, Power, SPDT	1
9	SC-22500	Screw, Pan Head, 6-32 x 1/4"	2
10	SC-2190	Ground Screw	1
11	BK-3019	T-Block	1
12	SC-2365	Screw, Round Pan Head, 6-32	2
13	SC-22271	Screw, Pan Head, M4	4
14	TN-33282	Transformer, 230V/24V, 50A	2
15	SW-34254	Switch, Cam, for Single Phase	1

ITEM	P/N	DESCRIPTION	Qty
16	HD-26792	Handle	1
17	TT-34245	Thermostat, Hi-Limit	1
18	LT-34280	Light, Ignition Alarm	1
19	NU-2187	Nut, Acorn #18-8	2
20	SC-2069	Screw, Pan Head, 8-32 x 1"	2
21	BN-34266	Ignition Module, Starter	1
*	BU-3964	Bushing, Straight Strain Relief	6
*	CB-34330	Cable, Flame Sensor, Red	1
*	CB-34331	Cable, Flame Ignitor, Black	1
*	CB-34999	Cable, Control	2
*	CD-34094	Cord, Line	1
*	CR-33510	Connector, Terminal .187" Quick	1
*	CR-34318	Connector, Plug, 3 POS, 94V-0	1
*	CR-34646	Connector, 5 Conductor	6
*	LT-34281	Light, Alarm	1
*	PA-27057	Plate, Light Mounting	1

* NOT SHOWN

TRANSPORTATION DAMAGE and CLAIMS

All Alto-Shaam equipment is sold F.O.B. shipping point, and when accepted by the carrier, such shipments become the property of the consignee.

Should damage occur in shipment, it is a matter between the carrier and the consignee. In such cases, the carrier is assumed to be responsible for the safe delivery of the merchandise, unless negligence can be established on the part of the shipper.

1. Make an immediate inspection while the equipment is still in the truck or immediately after it is moved to the receiving area. Do not wait until after the material is moved to a storage area.
2. Do not sign a delivery receipt or a freight bill until you have made a proper count and inspection of all merchandise received.
3. Note all damage to packages directly on the carrier's delivery receipt.
4. Make certain the driver signs this receipt. If he refuses to sign, make a notation of this refusal on the receipt.
5. If the driver refuses to allow inspection, write the following on the delivery receipt:
   Driver refuses to allow inspection of containers for visible damage.
6. Telephone the carrier's office immediately upon finding damage, and request an inspection. Mail a written confirmation of the time, date, and the person called.
7. Save any packages and packing material for further inspection by the carrier.
8. Promptly file a written claim with the carrier and attach copies of all supporting paperwork.

We will continue our policy of assisting our customers in collecting claims which have been properly filed and actively pursued. We cannot, however, file any damage claims for you, assume the responsibility of any claims, or accept deductions in payment for such claims.

LIMITED WARRANTY

Alto-Shaam, Inc. warrants to the original purchaser only that any original part that is found to be defective in material or workmanship will, at Alto-Shaam's option, subject to provisions hereinafter stated, be replaced with a new or rebuilt part.

The parts warranty period is as follows:

For the refrigeration compressor on Alto-Shaam Quickchillers™, five (5) years from the date of installation.

For the heating element on Halo Heat® cooking and holding ovens, as long as the original purchaser owns the oven. This excludes holding only equipment.

For all other parts, one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

The labor warranty period is one (1) year from the date of installation or fifteen (15) months from the shipping date, whichever occurs first.

Alto-Shaam will bear normal labor charges performed during standard business hours, excluding overtime, holiday rates or any additional fees.

To be valid, a warranty claim must be asserted during the applicable warranty period. This warranty is not transferable.

THIS WARRANTY DOES NOT APPLY TO:

1. Calibration.
2. Replacement of light bulbs, door gaskets, and/or the replacement of glass due to damage of any kind.
3. Equipment damage caused by accident, shipping, improper installation or alteration.
4. Equipment used under conditions of abuse, misuse, carelessness or abnormal conditions, including but not limited to, equipment subjected to harsh or inappropriate chemicals, including but not limited to, compounds containing chloride or quaternary salts, poor water quality, or equipment with missing or altered serial numbers.
5. Damage incurred as a direct result of poor water quality, inadequate maintenance of steam generators and/or surfaces affected by water quality. Water quality and required maintenance of steam generating equipment is the responsibility of the owner/operator.
6. Damage caused by use of any cleaning agent other than Alto-Shaam's Combitherm® Cleaner, including but not limited to damage due to chlorine or other harmful chemicals. **Use of Alto-Shaam's Combitherm® Cleaner on Combitherm® ovens is highly recommended.**
7. Any losses or damage resulting from malfunction, including loss of product, food product, revenue, or consequential or incidental damages of any kind.
8. Equipment modified in any manner from original model, substitution of parts other than factory authorized parts, removal of any parts including legs, or addition of any parts.

This warranty is exclusive and is in lieu of all other warranties, express or implied, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Alto-Shaam be liable for loss of use, loss of revenue or profit, or loss of product, or for any indirect, special, incidental, or consequential damages. No person except an officer of Alto-Shaam, Inc. is authorized to modify this warranty or to incur on behalf of Alto-Shaam any other obligation or liability in connection with Alto-Shaam equipment.

ALTO-SHAAM

Effective November 1, 2011

RECORD THE MODEL AND SERIAL NUMBER OF THE APPLIANCE FOR EASY REFERENCE.
ALWAYS REFER TO BOTH MODEL AND SERIAL NUMBER IN ANY CONTACT WITH ALTO-SHAAM REGARDING THIS APPLIANCE.

Model: _____ Date Installed: _____
Voltage: _____ Purchased From: _____
Serial Number: _____

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